

## **AMENDMENTS TO THE SPECIFICATION:**

Please add the following heading on page 1, after the title, as follows:

### **FIELD OF THE INVENTION**

Please replace paragraph [0001] on page 1 with the following amended paragraph:

The present invention relates to a leak detector ~~according to the characteristics of the preamble of the patent claim 1.~~

Please add the following heading on page 1 before paragraph [0002], as follows:

### **BACKGROUND OF THE INVENTION**

Please replace paragraph [0002] on page 1 with the following amended paragraph:

Leak detectors ~~of this kind~~ are known from publications DE-C2 31 24 205, DE-A1 42 28 313 and DE-A1 195 23 430. These are counterflow leak detectors which are commonly operated with helium as the test gas. During leak detection operation, the gas which in the instance of a defective device under test contains the test gas, flows through a line from the inlet of the leak detector to the backing pump. This line is connected through line sections to at least the outlet area of the high-vacuum pump, preferably also with a pressure stage. Depending on which of the line sections is open, leak detection is performed at a different sensitivities.

Please add the following heading on page 1 before paragraph [0004], as follows:

### **SUMMARY OF THE INVENTION**

Please replace paragraph [0005] on page 1 with the following amended paragraph:

This task is solved in accordance with the present invention ~~through the characterising features of the patent claims.~~

Please add the following heading on page 2 before paragraph [0007], as follows:

### **BRIEF DESCRIPTION OF THE DRAWINGS**

Please replace paragraph [0007] on page 2 with the following amended paragraph:

Further advantages and details of the present invention shall be explained with reference to the examples of embodiments depicted schematically in the ~~drawing figures 1 to 3. Depicted is in~~ drawing in which:

~~drawing figure 1~~ Fig. 1 depicts a leak detector with a high-vacuum pump designed by way of a compound pump, the molecular pumping stage which is of a single stage design, ~~as well ; and~~

~~drawing figures Figs. 2 and 3 (drawing figure 2 highly schematic) in each instance depict~~ a leak detector in accordance with the present invention with a compound pump, the molecular pumping stage of which in turn is of a multiple stage design.

Please add the following heading on page 2 before paragraph [0008], as follows:

#### **DETAILED DESCRIPTION**

Please replace paragraph [0020] on page 4 with the following amended paragraph:

An even higher level of sensitivity is attained when the valve 54 – expediently also the valve 62 – is closed and where the valves 53, 61 are opened. Also the valve 56 is – as already detailed – closed. In this operating mode the entire quantity of gas flowing through the test gas line 47 flows approximately at half the height through the molecular <sup>1)</sup> pumping stage 9, 16. Located expediently at the level of the connection ports 45, 57 is an annular channel 64 so as to reduce the flow resistance.

Please delete the footnote in toto on page 5.

Please delete the title in toto on page 7.

Please replace the heading on page 7 with the following rewritten heading as follows:

#### **We Claim:**

Please delete the footnote in toto on page 9.

Please delete the title in toto on page 10.